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ABSTRACT

This study examines the relationship of androgyny to occupational membership. It was hypothesized that: (1) persons in stereotypically masculine occupations would be characterized by high levels of masculininity; (2) workers in a typically feminine occupation would rate themselves as highly feminine; and (3) androgynous individuals would be under-represented in highly sex-typed occupations. Subjects were 85 men and women actively engaged in the professions of law, journalism, and library science, which are strongly stereotyped as masculine, neutral, and feminine, respectively. The Bem Sex Role Inventory was administered to each subject, and subjects completed biographical data sheets. A Masculinity and a Femininity score was computed for each subject, and analyzed by means of separate one-way analyses of variance to test the hypotheses under study. Findings confirm Hypothesis One. Hypothesis Two is not confirmed: no occupational differences were apparent, but significant sex differences were indicated. There may be a ceiling effect operating with respect to femininity, with variation in this level related only to sex of the subject. Another possible explanation is related to original classification of the occupations. For two of the three occupations under investigation the data support Hypothesis Three. Further research is necessary. (Author/JLL)

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# Sex, occupational membership, and the measurement of psychological androgyny

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The present study was designed to investigate the relationship of androgeny and its components (psychological masculinity and femininity) to membership in occupations which have long been considered appropriate only for one sex or the other. During the past few years, the traditional concept of masculinity and femininity as opposite ends of a bipolar continuum has been challenged by personality theorists (Constantinople, 1973; Bem, 1974) who argue that these constructs are, rather, separate dimensions, each present in both sexes to varying degrees. Foremost among this group is Bem (1974), who has advanced the concept of androgeny, which she defines as the possession of a more or less equal balance of these two variables. The Bem Sex Role Inventory (BSRI) incorporates masculinity and femininity scales which are logically and empirically independent of each other, allowing the computation of separate scores on each of these variables, as well as an androgeny score, which is derived by computing the difference between the subject's masculinity and femininity scores on the BSRI. The more closely this difference score approaches zero, the more androgynous the subject is assumed to be.

An alternative definition of androgeny, and the one adopted for use in the present study is that of Spence and her co-workers (Spence, Helmreich and Stapp, 1975) which requires not merely the balance of masculinity and femininity, but the possession of a high degree of both sets of characteristics. Research is accumulating that indicates that androgeny is positively related to behavioral flexibility (Bem, 1976), self-esteem (Wetter, 1975; Spence, et al., 1975) and various autobiographical factors (Woods, 1975).

The present study, examining the relationship of androgeny to occupational membership, hypothesized that persons in a stereotypically masculine

occupation would be characterized by high levels of masculinity, while workers in a typical feminine occupation were expected to rate themselves as highly feminine. A third hypothesis predicted that androgynous individuals would be under-represented in highly sex-typed occupations. This latter prediction derives from a paper by Worrell (1975) who suggested that androgynous persons would experience conflict in situations which were characterized by strong sex role stereotypes, and would resolve this conflict by avoiding such situations.

## Method

### Subjects

In order to test these hypotheses, research materials were completed by men and women actively engaged in the professions of law, journalism and library science, which Shinar (1975) demonstrated to be strongly stereotyped as masculine, neutral and feminine, respectively. In addition, these professions are all classified as Level 1 - General Cultural activities, according to Meir's (1968) elaboration of Roe's (1954) classification schema. (N = 85).

### Instruments

The subjects were told they were participating in a psychological study investigating the characteristics of different occupational groups. Each subject completed the Bem Sex Role Inventory by indicating on a 7-point scale how well each of the 60 personality characteristics contained in the inventory described her or himself. In addition, all subjects completed a short biographical data sheet. Both a Masculinity score and a Femininity score were computed for each subject, and analyzed by means of separate one-way analyses of variance in order to test the hypotheses under study.

## Results and Discussion

The Masculinity analysis yielded a significant effect for both occupation and sex in the expected directions, thus confirming Hypothesis 1.

In other words, people in the masculine occupation of attorney do indeed consider themselves to be more masculine than persons in either a neutral or a feminine occupation. In turn, the journalists rated themselves as more masculine than the librarians. This effect was observed for both males and females, although sex differences are evident in the absolute degree of masculinity the subjects attributed to themselves. When the data are graphed, there emerges a continuum of masculinity, anchored at the lower end by the librarians and at the upper end by the attorneys. This phenomenon seems best interpreted as a profile, with occupation providing the shape and the sex factor generating the level. Such a profile is depicted in Figure 1. The strength of the occupational effectis evidenced by the fact that not only did the male attorneys achieve higher masculinity scores than the male librarians, but so did the female attorneys.

The analysis of the subjects Femininity scores presents quite a different picture. This analysis yielded no occupational differences on this variable, but did indicate significant sex differences. In other words, persons in feminine occupations do not rate themselves as more feminine than persons in neutral or masculine occupations. They merely rate themselves as less masculine. The only differences that appear are those attributable to sex, with the females rating themselves overall as more feminine than the males. These results are graphed and appear in Figure 2.

This finding raises the possibility that there may be a ceiling effect operating with respect to femininity; that there may be a limit to the degree of femininity people are willing to attribute to themselves. Variation in this level seems related only to the sex of the subject. This interpretation seems reasonable in light of findings that the female role is less positively evaluated than the male role (Sherrifs and McKee, 1957).

Another possible explanation is related to the original classification of the occupations as Level 1. The results indicated that masculinity varied while femininity remained constant across the professions studied. One interpretation is that this latter variable is related to the level of the subject's occupation. Theoretical support for this concept comes from the empirical finding that femininity, as measured by Scale 5 of the MMPI, is related to intellectual interests in normal populations. One implication of the present study seems to be that femininity may be related to occupational level, while masculinity is related to occupational choice, or field.

It should be noted that the finding that masculinity is variable while femininity remains constant across the occupations in this study would have been obscured by use of a traditional test of masculinity and femininity, and thus further validates the use of an inventory where these are free to vary independently.

The third hypothesis under investigation stated that androgynous individuals would not be found in occupations which are highly sex-typed. Following the criteria of Spence and her colleagues, androgeny was defined as possession of a high degree of both masculinity and femininity. The total subject population was split at the median on both scales and the subjects were classified into one of the four resulting groups. The resulting 4 X 3 contingency table is presented in Table 2. Inspection of the frequencies reveals that the observed number of journalists in the androgynous (HH) cell closely approximates the expected, while librarians were severely under-represented, as had been predicted. Thus for two of the three occupations under investigation, the data support the hypothesis. However, it is readily apparent that, rather than being under-represented, androgynous attorneys are actually over-represented. No theoretical explanation for this finding is readily apparent.

The present findings are provocative; however, it is a truism that any study raises more questions than it answers. Further research is necessary to replicate these findings and extend them to other occupational groups. If it is found that the variables investigated here are, indeed, related to occupational membership across a wide range of occupations, then other questions become salient. How are these variables related to success and satisfaction, the two components of vocational adjustment? What are the antecedents of the present findings? That is, do masculine people choose masculine occupations, or do they, rather, become more masculine as they progress in these occupations? Also necessary is further investigation of the occupational stereotypes themselves, using the scales of the BSRI or conceptually similar instruments. The research in this area has, to date, been limited by use of bipolar scales of masculinity-femininity which obscure parameters of interest.

Finally, it should be noted that the overall sample size was not sufficient to allow separate Chi Square analyses to be conducted for each sex. Thus Hypothesis 3 could not be tested for possible sex differences. In addition, the use of the Chi Square analysis itself imposes several limitations on this and future studies. As long as androgeny remains a <u>derived</u> measure, involving high levels of two separate variables, its relationship to other variables of interest can only be investigated through this and similar non-parametric techniques. A good deal of information is lost when the scores must be somewhat arbitrarily divided at the median and consequently classified as high or low. The next step would seem to be the construction of an instrument capable of measuring androgeny directly, thus yielding a continuous variable capable of entering into relationships with other variables, and amenable to investigation by the usual parametric methods. This sort of instrument would facilitate the continuing research which is necessary in the area of the present study and related domains.

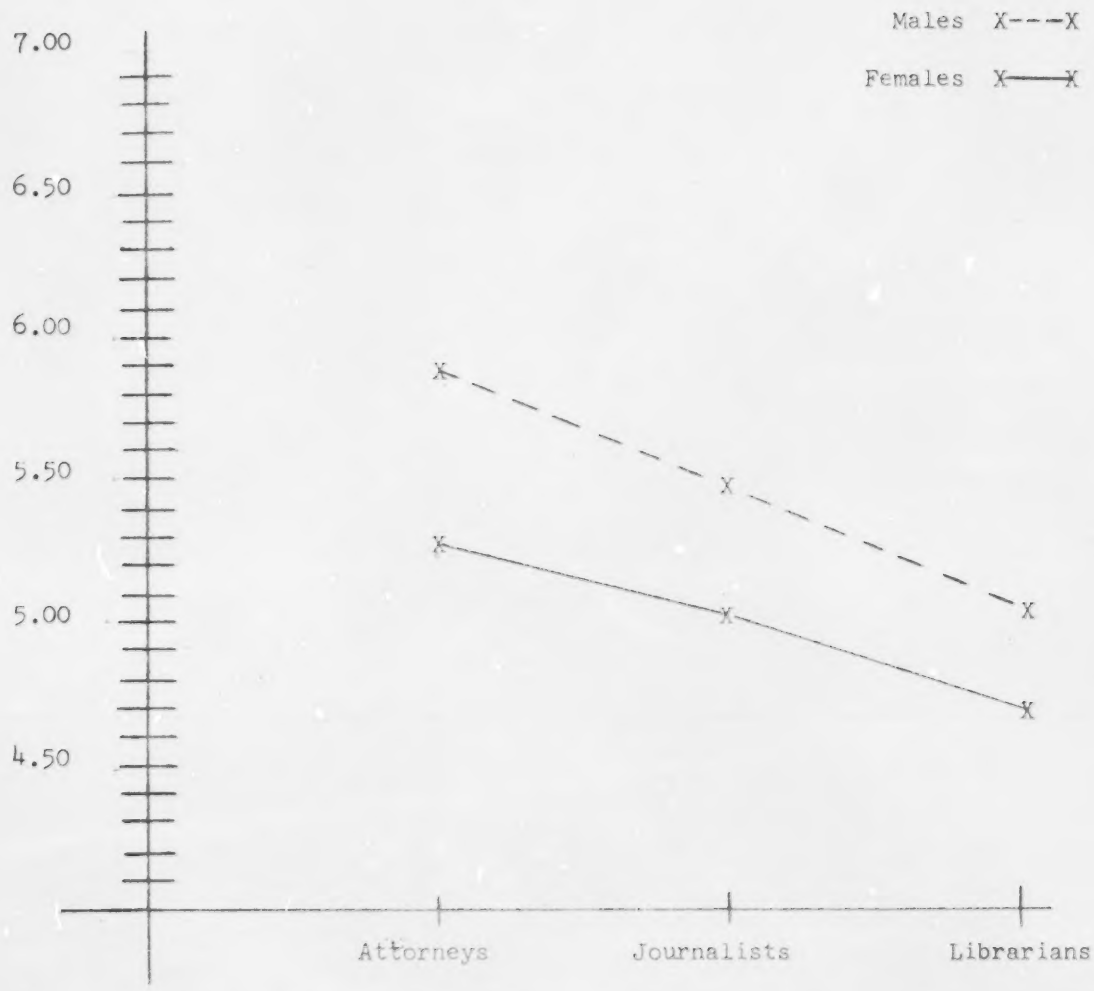


Fig. 1. Scores of males and females on the masculinity scale of the BSRI.

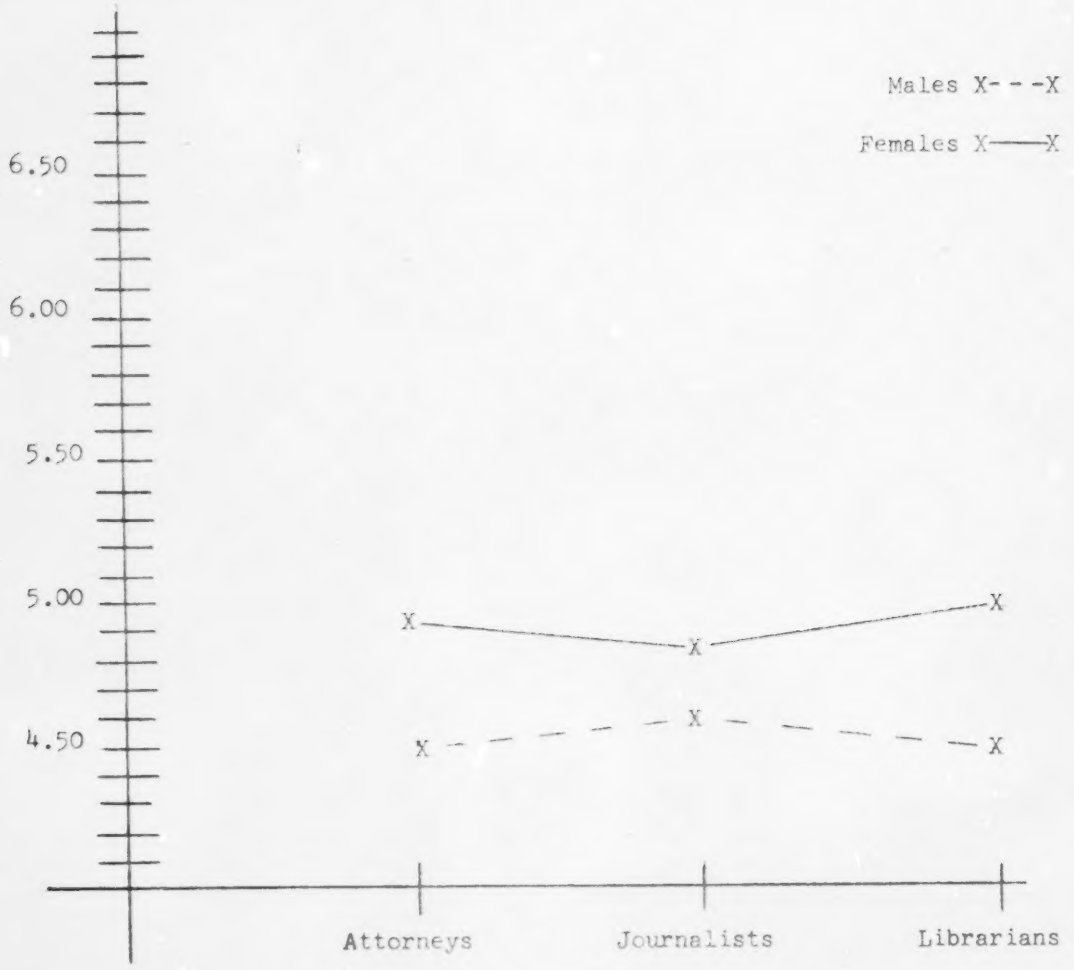


Fig. 2. Scores of males and females on the femininity scale of the BSRI.

Table 1

Means and standard deviations
of three occupational groups on the BSRI.

| | Attorneys | | Journalists | | Librarians | |
|---|---|---|---|---|---|---|
| | Males | Females | Males | Females | Males | Females |
| MASCULINITY | $\bar{X}$ = 5.83<br>s = 0.469 | $\bar{X}$ = 5.22<br>s = 0.804 | $\bar{X}$ = 5.46<br>s = 0.472 | $\bar{X}$ = 5.03<br>s = 0.775 | $\bar{X}$ = 5.04<br>s = 0.815 | $\bar{X}$ = 4.70<br>s = 0.476 |
| FEMININITY | X = 4.53<br>s = 0.579 | X = 4.86<br>s = 0.486 | X = 4.63<br>s = 0.349 | X = 4.73<br>s = 0.656 | X = 4.54<br>s = 0.475 | X = 5.05<br>s = 0.648 |

Table 2

Contingency table showing the distribution of three occupational groups into four sex role categories.

| | HH | HL | LH | LL | |
|---|---|---|---|---|---|
| Attorneys | E = 6.21<br>O = 12 | E = 10.48<br>O = 12 | E = 11.25<br>O = 6 | E = 5.05<br>O = 3 | 33 |
| Journalists | E = 3.76<br>O = 3 | E = 6.35<br>O = 7 | E = 6.82<br>O = 7 | E = 3.06<br>O = 3 | 20 |
| Librarians | E = 6.02<br>O = 1 | E = 10.16<br>O = 8 | E = 10.92<br>O = 16 | E = 4.89<br>O = 7 | 32 |
| | 16 | 27 | 29 | 13 | N = 85 |

$X^2 = 17.0395$, $p < .01$

Note: HH = High Masculinity, High Femininity (Androgynous)
HL = High Masculinity, Low Femininity (Sex-typed, masculine)
LH = Low Masculinity, High Femininity (Sex-typed, feminine)
LL = Low Masculinity, Low Femininity (Undifferentiated)

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